

S/N: 10/688,986
Art Unit: 2188

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1 March 2006
Atty. Dkt.: 2694/21

REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-47 are in this case. Claims 3, 10, 20-21, and 23 have been rejected under § 112, second paragraph. Claims 1-10 have been rejected under § 102(b) or § 103(a). Claims 6-8 have been canceled. Independent claim 1 and dependent claims 5, 10, 20-21, and 23 have been amended. New claims 48-50 have been added.

§ 112, Second Paragraph Rejections

The Examiner has rejected claims 3, 10, 20-21, and 23 under § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Claims 10, 20-21, and 23 have been amended to correct the deficiencies identified by the Examiner. Regarding claim 3, the limitation "said range" in line 1 refers to the expression "a range associated with a particular range boundary information", which appears on line 15 of claim 1.

In view of the revised language, and in view of the remarks on claim 3 provided hereinabove, the Applicant respectfully submits that the claims are now free from the deficiencies identified by the Examiner under § 112, second paragraph.

Information Disclosure Statement

Patent documents WO01/91132 and PCT/IL01/01025, in which Moshe Stark is the sole inventor, are being mailed to the Examiner.

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§ 102(b) and § 103(a) Rejections

The Examiner has rejected claims 1-8 under § 102(b) as being anticipated by U.S. Patent No. 6,711,661 to Zabarski et al. The Examiner has rejected claims 9-10 under § 103(a) as being unpatentable over Zabarski et al. The Examiner's rejections are respectfully traversed.

However, while continuing to traverse the Examiner's rejections, the Applicant has, in order to expedite the prosecution, chosen to amend independent claim 1 in order to clarify and emphasize the crucial distinctions between the device of the present invention and the device of the Zabarski et al. patent cited by the Examiner.

Specifically, amended claim 1 now recites that the range boundary information is stored in said memory storage units as logical two-dimensional arrays (TDAs) arranged for a search tree having a plurality of levels, so as to provide an increased rate of the data retrieval from said memory system to said processing logic.

The cited prior art does not teach, nor fairly suggest, the use of logical two-dimensional arrays arranged for a search tree having a plurality of levels. This feature advantageously provides the associative search engine with a highly increased rate of data retrieval from the memory system to the processing logic, which greatly improves search engine performance.

Thus, Applicant believes that the amendments to claim 1 completely overcome the Examiner's rejections on § 102(b) grounds.

Extensive support for these amendments can be found in the Figures, text, and original claims of the Specification, inter alia, in the language of original claim 11.

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New Claims 48-50

New independent claim 48 is largely based, inter alia, on original claims 1 and

11. The definition of "Range", as used in claim 48, is taken from the instant Specification (page 66, lines 2-7):

Regarding Range definitions, a Range is defined as a set of all the integers K that comply with the condition $N_L \leq K < N_H$, where N_L and N_H are two integers such that $0 \leq N_L < N_H$; N_L and N_H are defined as the Range Lower and Upper Boundaries, respectively. The Range definition implies that the Range Lower Boundary N_L is closed and belongs to the Range, whereas the Range Upper Boundary N_H is open does not belong to the Range (or vice versa).

Dependent claim 49 draws support, inter alia, from original claim 11. Dependent claim 50 draws support, inter alia, from original claim 3. Applicant wishes to emphasize that the use of a single boundary value to represent the Range defined in claim 48, is not taught, nor fairly suggested, by the cited prior art, and is highly advantageous with respect to more lengthy and cumbersome range representations known in the art.

In view of the above amendments and remarks it is respectfully submitted that claims 1-5 and 9-50 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



Mark M. Friedman
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Date: March 1, 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Applicant: Stark et al.

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Serial No.: 10/688,986

Filed: October 21, 2003

Group Art Unit: 2188

For: Multi-Dimensional Associative
Search Engine Having
an External MemoryAttorney
Docket: 2694/21

Examiner: Jasmine Song

Commissioner of Patents and Trademarks
Alexandria, Virginia 22313RESPONSE TRANSMITTAL

Sir:

- (1) Applicant is a:
☒ small entity ☐ verified statement attached
☐ ☒ verified statement filed
☐ other than small entity
- (2) The fee for claims 37 CFR 1.16(b)-(d) has been calculated as shown below:

FOR:	CLAIMS		AMENDED		SMALL ENTITY		OTHER THAN A SMALL ENTITY	
	ON FILE	CLAIMS		RATE	FEE	OR	RATE	FEE
TOTAL CLAIMS	47			0 x 25=	\$ 0	OR	x 50=	\$
INDEP CLAIMS	3	4		1 x 100=	\$100	OR	x 200=	\$
				TOTAL	\$100	OR	TOTAL	\$

- (3) An amendment ☒ is filed herewith
☐ has been filed
- (4) Please charge the extension fee and any other amount required to Deposit Account No. 06-2140.
 A duplicate copy of this form is enclosed.

Respectfully submitted,



 Mark M. Friedman
 Attorney for Applicant
 Registration No. 33,883

Date: March 1, 2006